

Manganese Greensand Filter

Manganese Greensand is formulated from a glauconite greensand which is capable of reducing iron, manganese and hydrogen sulfide from water through oxidation and filtration. Soluble iron and manganese are oxidized and precipitated by contact with higher oxides of manganese on the greensand granules. The hydrogen sulfide is reduced by oxidation to an insoluble sulfur precipitate. Precipitates are then filtered and removed by back-washing. When the oxidizing capacity power of the Manganese Greensand bed is exhausted, the bed has to be regenerated with a weak potassium permanganate (KMnO₄) solution thus restoring the oxidizing capacity of the bed.

ADVANTAGES

- Iron reduction over wide pH range.
- Effective reduction of hydrogen sulfide, in addition to iron and/or manganese.
- No harmful effects from a chlorine feed.
- Low attrition for long bed life.

CONDITIONS FOR OPERATION

- Water pH range: 6.2-8.5
- Maximum water temperature: 80°F/26.7°C
- Bed depth: 30 in.
- Freeboard: 50% of bed depth (min.)
- Regeneration: 1.5-2 oz of KMnO₄ by weight per cu. ft.
- Service flow rate: 3-5gpm/sq. ft., 8-10gpm/sq. ft. intermittent flow possible
- Backwash flow rate: 10-12gpm/sq. ft.
- Backwash bed expansion: 40% of bed depth (min.)
- Maximum practical limit of iron (Fe⁺⁺) or manganese (Mn⁺⁺) in raw water: 15ppm
- Maximum practical limit of hydrogen sulfide (H₂S): 5ppm

Fleck 2510 Control Valve Features

- Fully adjustable 5-cycle top mount control delivers controlled downflow regeneration and slow rinse, rapid rinse, regenerate refill and downflow service.
- Time-tested hydraulically balanced piston, seal and spacer concept to control service flow and regeneration
- Non-corrosive, high-tech material construction.
- Excellent flow rates - 19 GPM continuous, 24 GPM peak
- Backwash capacity handles tanks up 16" diameter for filter applications.
- 12 day clock initiated regeneration.



Filtration system for removing iron, manganese and hydrogen sulfide from water through oxidation and filtration.

Authorized Distributor:



MADE IN THE U.S.A.

Providing service after the sale since 1967.

